MANUAL

MARINE STEREO UNIT

MS-CD500G
MS-CD500W

MS-IP500G
MS-IP500W

FUSION®

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RECORD YOUR PRODUCT DETAILS HERE:

MODEL NUMBER _____ DATE OF PURCHASE _____

AFFIX RECEIPT HERE

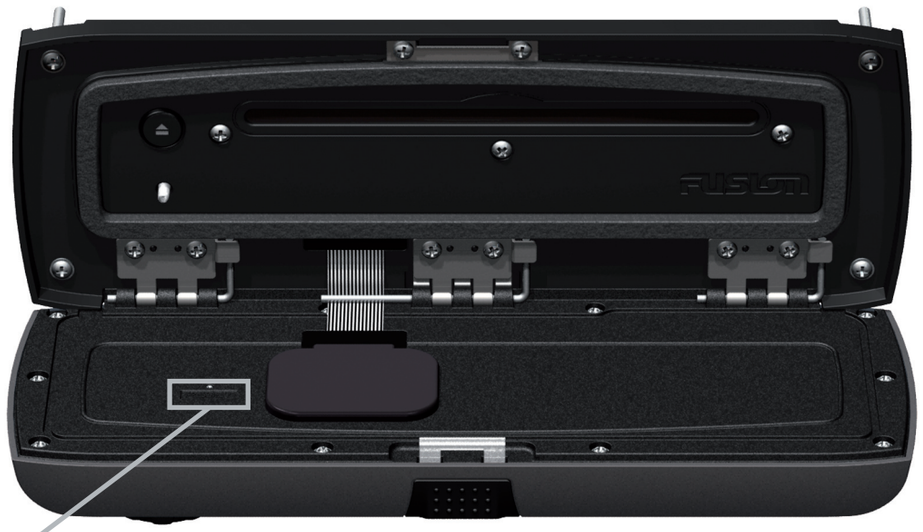
BUTTON DESCRIPTION

BUTTON	DESCRIPTION
	Power Press to turn the unit ON/OFF
	Menu Press to enter menu system and press again to return to previous screen
	Radio Press to access the Radio source FM - AM - SAT
	CD (MS-CD500 only) Press to access the CD/MP3 source
	AUX (MS-IP500 only) Press to access Auxiliary source
	iPod. Press to access the iPod source Press again to access AUX (MS-CD500)
	Back/Previous. **Short Press:** To select the previous track in CD/MP3 or iPod mode. Start automatic tuning down the frequency spectrum in the Tuner mode. **Press and hold:** Rewind in CD/MP3 or iPod mode. Start manual tuning down the frequency spectrum in the Tuner mode.

BUTTON	DESCRIPTION
	Forward/Next **Short Press:** To select the next track in CD/MP3 or iPod mode. Start automatic tuning up the frequency spectrum in Tuner mode. **Press and hold:** Fast-forward in CD/MP3 or iPod mode. Start manual tuning up the frequency spectrum in the Tuner mode
	Play/Pause Play/Pause track in CD/MP3 and iPod mode.
	Mute Mutes all sound in all zones
	Clock Displays the clock
	Display Brightness Press to enter display brightness setting. Turn the **Rotary Encode**r to adjust
	Rotary Encoder The rotary encoder operates similar the click wheel on an iPod. Turn to adjust volume or move up or down a menu structure. Press the **Rotary Encoder** to select a highlighted option.

RESET BUTTON

- Press the Reset button to reset the unit to the factory settings



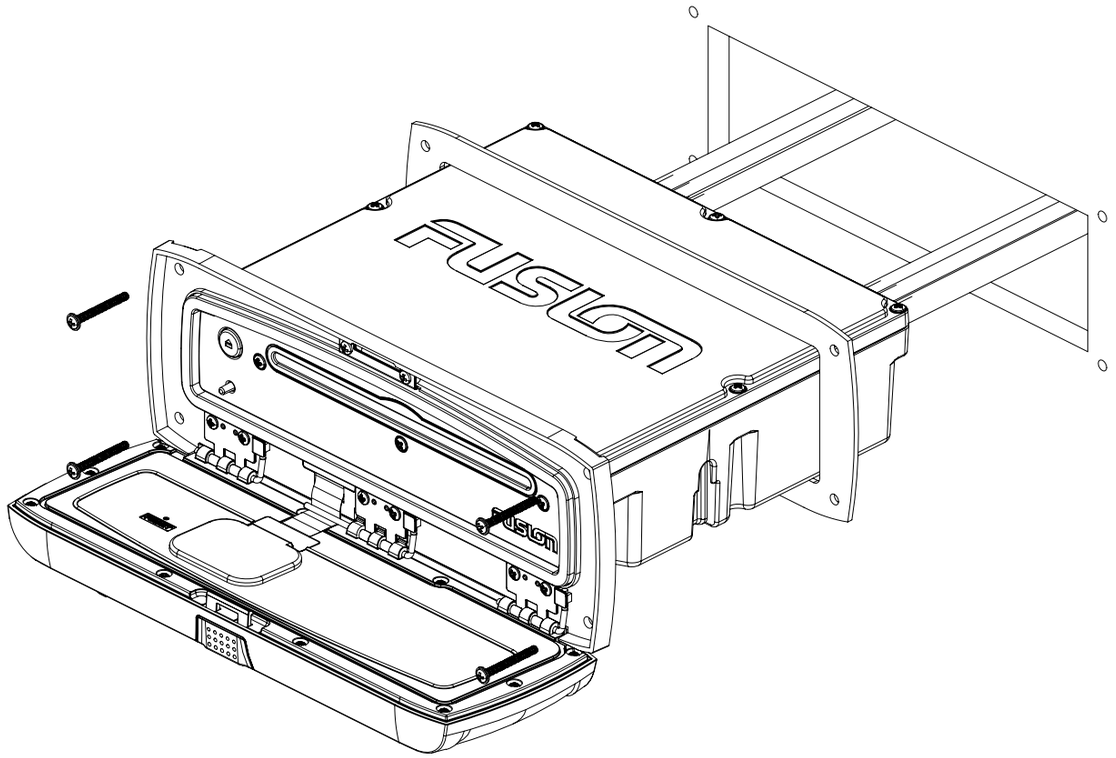
INSTALLATION

If any modification to the vessel is required, such as drilling holes, etc Fusion recommends consultation with your boat dealer or manufacturer beforehand.

1. Remove the Sun cover from the unit
2. Insert the unit into the mounting hole
3. Pull down the front face to expose the mounting screw locations.
4. Use either the supplied 4 x wood screws, or 4 x machined screws and metal clamps to affix the unit into position.
5. The unit must be mounted within 30 degrees of the horizontal plane.

Note: in some circumstances a back strap or brace may be required at the rear of the Unit, (Back Strap / brace is not included)

Appropriate mounting is very important to ensure correct operation. Select a location that allows both free/open airflow around rear of chassis, whilst minimising exposure to moisture



ELECTRICAL WIRING

Caution: The MS-IP500 and MS-CD500 are designed for vessels with a 12Volt Negative ground electrical system

POWER CONNECTIONS

DESCRIPTION	COLOUR
Battery +12VDC	Yellow
Accessory +12V switched	Red
Negative Ground	Black
Remote Amplifier Turn On	Blue/White

Refer to the wiring diagram for reference

ZONE CONNECTIONS

Zone 1 Speaker connection (2 Ohm Stereo minimum)
- White = Speaker Left Positive
- White / Black = Speaker Left Negative
- Grey = Speaker Right Positive
- Grey/ Black = Speaker Right Negative

Low level output(Connection to external amplifier required)
- White RCA= Left Output
- Red RCA = Right Output
- Orange RCA= Subwoofer Output

Zone 2 Speaker connection (2 Ohm Stereo minimum)
- Green = Speaker Left Positive
- Green / Black = Speaker Left Negative
- Purple = Speaker Right Positive
- Purple / Black = Speaker Right Negative

Low level output (Connection to external amplifier required)
- White RCA= Left Output
- Red RCA = Right Output
- Orange RCA= Subwoofer Output

Zone 3

Low level output (Connection to external amplifier required)
- White RCA= Left Output
- Red RCA = Right Output
- Orange RCA= Subwoofer Output

Zone 4

Low level output (Connection to external amplifier required)
- White RCA= Left Output
- Red RCA = Right Output
- Orange RCA= Subwoofer Output

Antenna Connection

Connect an AM/FM marine antenna.

AUX Input (Optional)

Connect an Auxiliary source to the left and right RCA

iPod Connection (MS-CD500 only)

Connect the 1.5 meter iPod accessories lead (not included - MS-IL500)
Connect the MS-IPDOCK (Not Included)

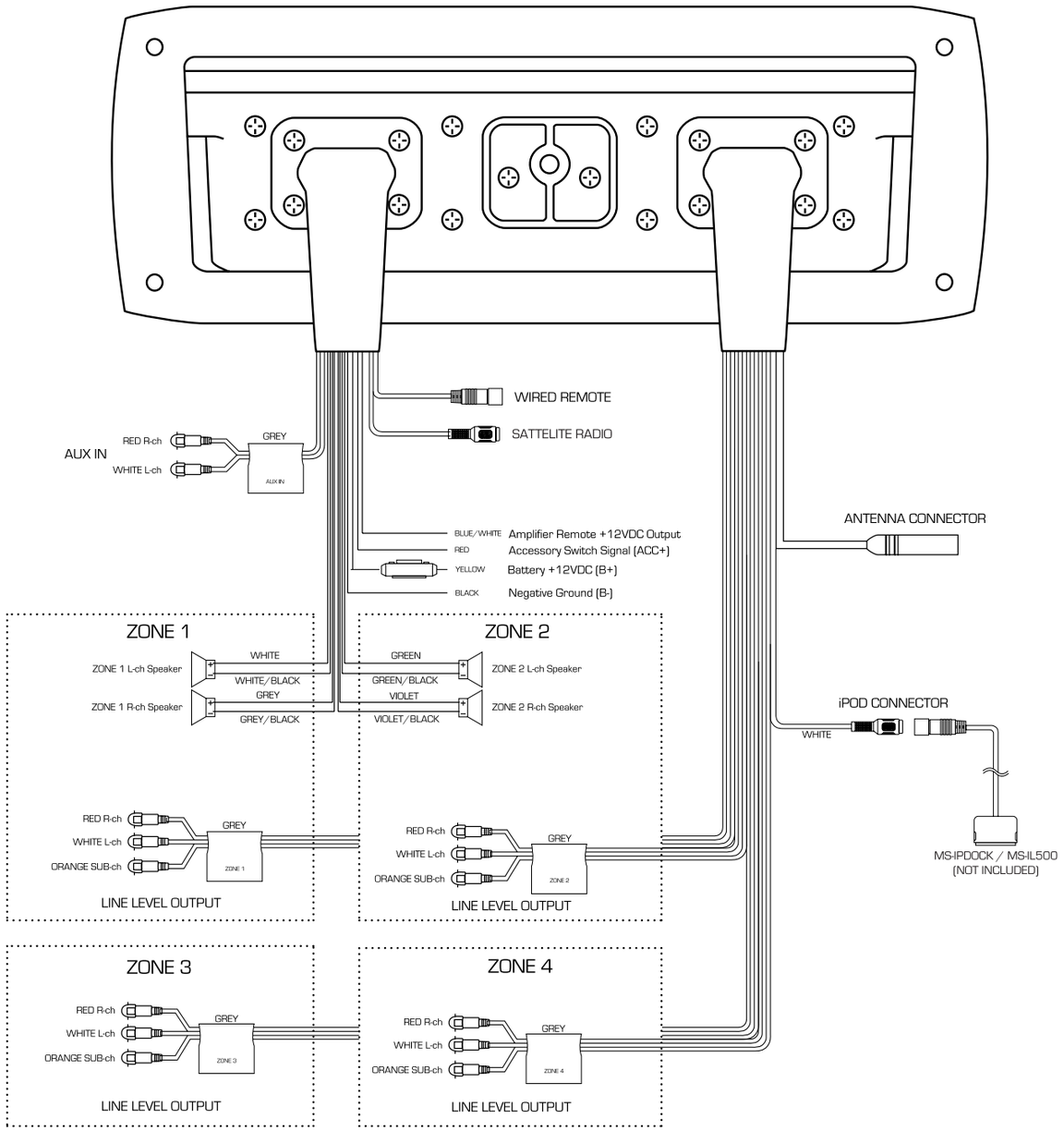
Sirius Satellite Radio (USA Only)

Connect to SiriusConnect(tm) tuner (not included)

Wired Remote MS-WR100

Connect the marine wired remote to the CANbus system connector cable.

WIRING DIAGRAM



OPERATION

The MS-CD500 and MS-IP500 features Clock battery back up and Eprom technology, This allows the unit to be completely disconnected from the vessels +12volt Voltage supply (Battery switch) with No settings lost.

Power

Press to turn the unit ON/OFF

SELECTING A SOURCE

Press the desired source button:

Radio	AM/FM/Sat
CD	CD/MP3 (MS-CD500)
iPod/AUX	Press once for iPod (MS-IP500) Press twice for AUX (MS-CD500)
AUX	Aux direct (MS-IP500)

ADJUSTING THE VOLUME

- Turn the to adjust the volume (Zone 1 Default)

ZONE VOLUME

- Press the to select zone. Press again to step through zones.
  Zone 1 – All zones – Zone 2 – Zone 3 – Zone 4

GENERAL SETUP

- Press the and rotate the to select the Setup menu. Press to enter.
- Turn the to select the function and press to enter
- Turn the to adjust and press to return.

SETTINGS

Treble

Adjusts the treble to the speakers

Bass

Adjusts the bass to the speakers

Balance

Adjusts the audio balance from left to right

Contrast

Adjusts the display contrast.

Key Sound

Press to turn ON / OFF

AUX Configuration

AUX ON/OFF - Select OFF if no auxiliary device is connected, this will remove the AUX feature from the source list.

AUX Name - Select the desired AUX name

AUX – TV – DVD – GAME – PORTABLE - COMPUTER

Clock Adjust

Adjusts the Clock time, 12/24 hour

Turn the to adjust the Hour, Press to confirm, repeat to adjust the minutes, Press to confirm.

Regions (tuner regions Europe / USA)

Select Europe for the following tuner frequency stepping

FM Radio
Frequency Range: 87.5 – 108 MHz Frequency step: 100 kHz
AM Radio
Frequency Range: 522 – 1620 MHz Frequency step: 9 kHz

Select USA for the following tuner frequency stepping

FM Radio
Frequency Range: 87.5 – 107.9 MHz Frequency step: 200 kHz
AM Radio
Frequency Range: 530 – 1710 MHz Frequency step: 10 kHz

Note: Remember, whilst in the menu system the acts as a back/return to the previous menu screen.

Power save

Off = Backlight on
On = LCD backlight goes off after one minute of non-operation

RADIO OPERATION

Region Selection

Press and turn to select setup - Press to enter - turn the to select tuner region
Press to enter and press to select region

Band Selection

Press the to select band
FM – AM – SAT

Tuning

There are 15 presets available per band.

Seek Tuning

1. Press the or to scan to the next station.
2. The selected station will be auto saved into the station presets menu.

Manual Tuning

1.Press and hold the or for 3 seconds to enter. The manual tuning icon will flash on screen.
2.The selected station will be Auto saved into the presets menu.
Note: Once the station is selected the station will be stored into the pre-set menu and the manual tuning icon will be removed.

Auto Tuning

Press the and turn the to navigate to the “Search Station” function. Then press to search and store.
Note: Automatic tuning mode will erase all other presets already stored for the selected band and will automatically store the station into the Preset menu in numerical order.

Recalling a Preset Station

1. Select the required band. FM – AM – Sat

2. Press the and then turn the select the “Presets” option and press to enter.
3. Turn the to select the desired preset and press to select

SIRIUS SATELLITE RADIO - USA only - SIRIUS TUNER NOT INCLUDED

SIRIUS ACTIVATION

Activating Your Sirius Tuner

You must activate the SIRIUS tuner before you can begin to receive the SIRIUS Satellite Radio Service.
In order to activate your radio subscription, you will need the SIRIUS ID (SID) which uniquely identifies your tuner. The 12 digit SID is displayed on the LCD on initialization. MS-CD500 and MS-IP500 will display the SID on Channel 0.
Power on your system and make sure that you are receiving good signal you are able to hear audio on the SIRIUS Preview channel (Ch-184)

Note:
Have your credit card handy and contact SIRIUS on the internet at https://activate.sirius.radio.com/ and follow the prompts to activate your subscription. You can also call SIRIUS toll-free at 1-888-539-SIRIUS (1-888-539-7474) Once activated, you will be able to begin enjoying SIRIUS Satellite Radio's digital entertainment and can tune to other channels.

SIRIUS OPERATION

Press the to select Sat Radio

SIRIUS NAVIGATION

Press the and enter the menu, turn the to navigate the functions and press to select.

- **Channels**
  Select the desired channel (listed in channel order) and music preference

- **Category**
  Select the desired genre type. (The unit will only play the selected option)

- **Favourites**
  Add your favourite channel to your favourites list by selecting “add favourite”.
  (Maximum 15 channels)
  Remove channels by selecting “Remove Favourite” select “ALL” or the individual channel and push Enter
  Exit MNU by pressing

- **Parental Mode**
  Pin #
  Turn to select number and press to enter, repeat to enter the 4 digit code. (Default is 0 on 1st time use)
  NOTE: Must be entered before the following items are operational.
  Mode on/off
  Turn On to initiate parental locking of selected channels etc, turn Off for full channel access
  Lock / Unlock
  Select the channel to be locked or unlocked
  Skip / Un-skip
  Select the channel to be bypassed from the menu
  Change Pin
  Personalise your Pin number. (4 digits max)

CD/MP3 OPERATION

LOADING / EJECTING A CD OR MP3 (MS-CD500 ONLY)

Notes:
Never insert foreign objects into the CD slot.
If the CD does not insert easily, there may already be another CD in the unit. Some CD-R/CD-RW may not be readable if the format is not compatible.

LISTENING TO A CD/MP3 ALREADY INSERTED

Press the CD button to select CD / MP3 mode. Playback of the CD will start automatically.

CD / MP3 FUNCTIONS

BUTTON	DESCRIPTION
	CD Press to access the CD/MP3 source
	Play/Pause Pause or Play the track
	Back/Previous. **Short Press:** Selects previous track **Press and hold:** Rewind track
	Forward/Next **Short Press:** Selects next track **Press and hold:** Fast-forward track

CD NAVIGATION

Press and turn the to select tracks ,turn the to select desired track and press to confirm.

MP3 NAVIGATION

Note: The MP3 disc will take approx 10 seconds to load the disc data (if available) to the unit.

Press the and enter the MP3 root directory, turn the to navigate the functions of your MP3 folders and files.
Press to select the highlighted Folder or file.

Note: Press the to return to the previous menu screen.

REPEAT SONG

Press and turn the to select Repeat/Shuffle

Press the to select ON/OFF - default setting is OFF

SHUFFLE

Press and Turn the to select Repeat/Shuffle
Then press to select ON/OFF
Default setting is OFF

PRECAUTIONS FOR MP3

The format of the disc must be ISO9660 Level 1 or 2 or Joliet in the expansion Format
When naming an MP3 file, ensure the file extension is * .MP3

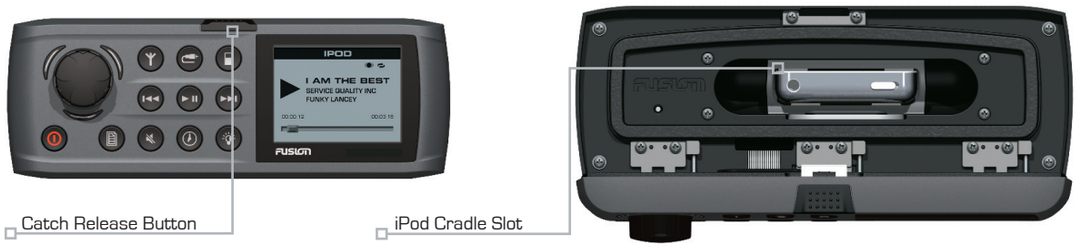
CONNECTING AN iPod (MS-CD500 only)

- Connect the iPod cable from the MS-CD500 to the iPod. (MS-IL500 Cable not included)
- Connect the MS-IPDOCK cable to the iPod connection on the MS-CD500

MS-IPDOCK (Not included)

MS-IP500

LOADING / EJECTING AN IPOD (MS-IP500 ONLY)



Note:
Failure to correctly insert you iPod will result in damage to your iPod and the FUSION Marine Stereo.

Selecting the correct iPod Sleeve
The MS-IP500 has 8 possible iPod solutions.
A different set of sleeves is used for each iPod model. The different sleeve combinations are outlined in the chart below:

iPod	Top sleeve	Bottom sleeve
classic, 5th Gen (30gb)	A	A
classic, 5th Gen (60/80gb)	A	B
classic, 6th Gen (80gb)	B	A
classic, 6th Gen (160gb)	B	B
classic, 7th Gen	B	A
itouch, 1st Gen, 2nd Gen	D	D
nano, 2nd Gen	C	C
nano, 3rd Gen, + Adapter	A	A
nano, 4th Gen	E	E

Please note: For the iPod nano (3rd gen), the iPod must be placed inside the adaptor sleeve, and then placed inside Dock sleeve combination A.

Please note: Place the sleeves inside the Stereo Unit before inserting your iPod.

BUTTON	DESCRIPTION
	iPod. Press to access the iPod source
	Play/Pause Play/Pause track in CD/MP3 and iPod mode.
	Forward/Next **Short Press:** To select the next track in CD/MP3 or iPod mode. **Press and hold:** Fast-forward in CD/MP3 or iPod mode.
	Back/Previous. **Short Press:** To select the previous track in CD/MP3 or iPod mode **Press and hold:** Rewind in CD/MP3 or iPod mode

IPOD NAVIGATION

Press the to enter the iPod menu, use the to navigate the functions of your iPod. The rotary encoder operates similar to the click wheel on your iPod. Turn to navigate and press to enter.

Note: Press the to return to the previous menu screen.

NO iPod Connected
If this appears on the display possible causes are

1. Ensure the iPod is correctly connected
2. Ensure the cable is not excessively bent
3. The iPods battery remains low (refer to iPod manual and charge the battery)
4. The iPods software version is not compatible (update software version to be compatible with this unit)

AUX OPERATION

CONNECTING AN AUXILIARY AUDIO DEVICE

1. The Left & Right AUX RCA plugs are located at the rear of the unit.
2. Connect your auxiliary audio device.

Note: You may require an adapter cable to connect your device.

LISTENING TO YOUR AUXILIARY AUDIO DEVICE

1. Press the on the main unit to select AUX mode (MS-IP500) or press twice (MS-CD500)
2. Start playback on your auxiliary audio device. Use both the volume control on your auxiliary device (if available) and the volume control on the FUSION Marine Stereo to set the volume level.

AUXILIARY NAMING

See page 9

ZONE OPERATION

ZONE SETUP AND CONTROL

There are 4 configurable zones available on the FUSION Marine Stereo. Each zone has independent volume control, subwoofer configuration, and balance control. Not all zones have to be configured, for the unit to run.

Note: Zone one is the default and cannot be switched off

ZONE SET UP

The Marine Stereo can be configured to control specific audio zones on your boat. This zone can then be turned ON/OFF separately to other zones.

Note: If the Zone is selected as "OFF" The features are not available,

1. Access the Zone Setup Menu by pressing the then turn the and press to select 'ZONES'
2. Turn the to select the zone you wish to setup –

   Zone 1 **Zone 2** **Zone 3** **Zone 4**

3. You can adjust the following settings for each zone in the Zone Setup menu, by using the

   Zone ON/OFF

   Select "On" if zones are present on the vessel (Z - 2, 3, 4)

   Note: Zone 1 cannot be turned OFF

   Volume Limit

   Adjust the "Volume Limit" to the desired maximum Output volume setting to each individual Zone,

   Sub Limit

   Adjust the level of output for the subwoofer used in the zone

   Low Pass (L/P) Filter

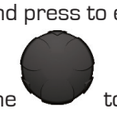
   Adjust the Low pass Frequency output (Off, 50Hz, 80Hz, 120Hz) to the subwoofer used in the zone

   High Pass (H/P) Filter

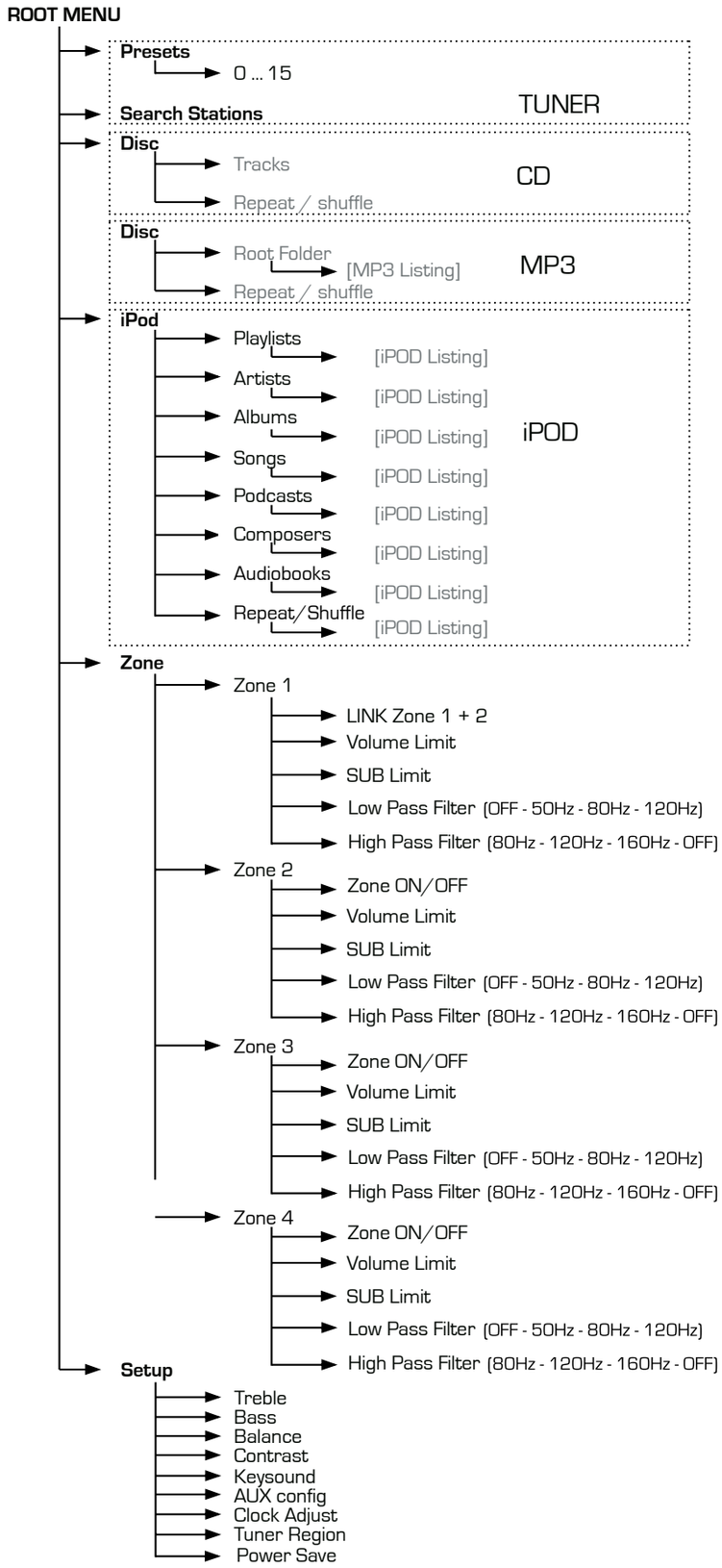
   Adjust the High pass Frequency output (Off, 160Hz, 120Hz, 80Hz) to the Speakers used in the zone.

LINK ZONE 1 + 2

Allows the volume control to operate zones 1 + 2 as a combined pair. The Zone set up for Zone 1 and 2 can be configured separately when in this mode.

1. Access the Zone Setup Menu by pressing the then turn the and press to select 'ZONES'
2. Turn the and press to enter 'zone 1'
3. Rotate and press the  to select the "Link zone 1 + 2"
4. Select ON to activate this feature.

MENU STRUCTURE



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SIRIUS READY

PRECAUTIONS

Handling Compact Discs (CD/CD-R/CD-RW)

- Avoid touching the surface of the disc
- Avoid exposing the disc to direct sunlight
- Ensure the disc is clean
- Ensure the disc is not scratched or damaged

Playback of CD-R/CD-RW

- If your CD-R/CD-RW will not play, Ensure that the last recording session was closed or finalized.

Supported Media

- Only use compact discs with the CD logo's on the label as listed below.

COMPACT disc DIGITAL AUDIO TEXT COMPACT disc DIGITAL AUDIO

- If you use compact discs without the above logo's correct performance cannot be guaranteed.
- You can play audio discs recorded on CD-R (Recordable) and CD-RW (Re Writable) media
- MP3 formatted audio files can also be played on CD-Rs and CD-RWs containing these files.

SPECIFICATIONS

Chassis Dimensions Depth 160mm - 6-5/16" Width 180mm – 7-1/8" Height 52mm – 2-1/16"
Face Plate Dimensions Depth 36mm – 1-7/16" Width 217mm – 8-9/16" Height 79mm – 3-1/8"

Operating Voltage:	10.2 – 16VDC Negative ground
Fuse rating:	15 Amp
Output power:	70 Watts x 4 (Max)
Speaker Impedance:	2 – 4 Ohms per channel
Pre –output Voltage:	2V

TUNING RANGE

Europe

FM Radio
Frequency Range: 87.5 – 108 MHz Frequency step: 100 kHz
AM Radio
Frequency Range: 522 – 1620 MHz Frequency step: 9 kHz

USA

FM Radio
Frequency Range: 87.5 – 107.9 MHz Frequency step: 200 kHz
AM Radio
Frequency Range: 530 – 1710 MHz Frequency step: 10 kHz

CD Player

Laser power Class 1

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YOU CAN HELP PROTECT THE ENVIRONMENT!
Please remember to respect the local regulations:
Hand in the non-working electrical equipment to an appropriate waste disposal center.

NOTES